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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,162	08/01/2006	Daniel John Deer	128813	4351
25944 7590 03/04/2009 OLIFF & BERRIDGE, PLC P.O. BOX 320850 ALEXANDRIA, VA 22320-4850				
EXAMINER VARGOT, MATHEU'D				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
03/04/2009		PAPER		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/588,162

Applicant(s)

DEER ET AL.

Examiner

Mathieu D. Vargot

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SE/US)
Paper No(s)/Mail Date 8/1/06 & 6/14/07
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

1. Upon reconsideration, the restriction requirement has been vacated and an action hereby follows on claims 1-12.

2. Claims 3-5 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 3, line 2, --preparation—should be inserted after “tooth”. In claim 4, line 2, “one or both or” should be changed to --one or both of--. Claim 11, line 2, --tooth— should be inserted before “preparation”.

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless —

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 6 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Schmitt et al (see col. 5, lines 5-14; col. 6, lines 47-54; Fig. 16).

Schmitt et al discloses the instant method of manufacturing a fixed denture (cap/crown) by identifying the surface of a tooth preparation (the digitized contour data), relating the identified surface to a near net shape (the cast pattern 57b) and altering the near net shape version to form the instant denture through (EDM) machining. See column 6, lines 47-54 and Fig. 16).

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt et al.

Schmitt et al discloses the basic claimed method as set forth in paragraph 3, *supra*, the applied reference failing to disclose that the inner profile of the denture includes an offset and that a reference feature is provided on the near net shape and tooth preparation. Since the crown of Schmitt et al has to be cemented to the tooth in the patient's mouth, it is submitted obvious that one of ordinary skill in the art would have allowed for an offset—ie, space for the adhesive to be placed—so that the denture would be affixed to the tooth as necessary. It is fairly conventional in the art to use identifying marks or reference features on molds and articles molded therefrom so that particular lots of articles can be easily identified. It would have been obvious to have modified the method of Schmitt et al by using such reference marks to facilitate identification.

5. Claims 4, 5 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schmitt et al in view of the admitted prior art as set forth in paragraphs 0002 and 0003 of the instant PG Pub.

Schmitt et al discloses the basic claimed method lacking essentially the employment of a wax model from which data is digitized and the employment of pre-formed sintered shells to which the near net shape version is related. The admitted prior art teaches that making wax models is known (paragraph 0003) and that it is also conventional to directly machine a coping from a block of ceramic, which is presumably

already sintered (paragraph 0002). Also, ceramic shells can be made by pressing and then sintering the ceramic from paragraph 0002. The point is, it is known in the art to make these sintered shells and it is submitted that it would have been obvious to have made a number of them and kept them in stock so that a match would be made when a patient needing treatment requires a crown. The match between the patient and an existing shell would have been made by a best fit technique so that costly machining of the sintered shell is minimized. It would have been obvious to one of ordinary skill in the art to modify the method of Schmitt et al by having a stock of pre-formed sintered shells as set forth in the instant claims to facilitate the denture forming process. It is submitted that forming the denture completely de novo or forming one from an already made stock of ceramic shells, where the best fit one is chosen and then machined to the exact size, would have been obvious modifications over each other.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mathieu D. Vargot whose telephone number is 571 272-1211. The examiner can normally be reached on Mon-Fri from 9 to 6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson, can be reached on 571 272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M. Vargot
February 26, 2009

/Mathieu D. Vargot/
Primary Examiner, Art Unit 1791